

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE:** STP00-0218-01(001) Chatham **OFFICE:** Engineering Services  
CSSTP-0007-00(259)  
P.I. Nos.: 522790 & 0007259  
Jimmy Deloach Parkway Extension **DATE:** August 30, 2010

**FROM:** Ronald E. Wishon, State Project Review Engineer *REW*

**TO:** Bobby K. Hilliard, PE, State Program Delivery Engineer  
Attn.: Robert Murphy

**SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES**

The VE Study for the above projects was held March 8-11, 2010. Responses were received on August 30, 2010. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/ LCC	Implement	Comments
<b>PI No. 522790 ROADWAY (RD)</b>				
RD-1	Use a 32 ft depressed median in lieu of a 44 ft depressed median	\$610,045	Yes	This will be done.
RD-2	Use Type A median opening in lieu of Type B median opening for the SB left turn lane onto driveway at Sta. 107+00	Proposed = \$231,397 Actual = \$379,400	No to recommendation as proposed  Yes to alternate recommendation	An alternate recommendation to eliminate the median break has been proposed and accepted. The median break was originally proposed to accommodate future growth, but both Chatham County and GDOT have indicated it is not required at this time. The actual savings represents the savings generated by eliminating the median opening.
RD-3	Lower the profile grade over the CSX railroad crossing	\$1,131,781	Yes	This will be done.

RD-14	Use separate structures for Little Ogeechee River Bridge and a Type A median opening for the SB left turn lane in order to reduce the bridge width	\$378,263	Yes	This will be done.
RD-22	Provide single span bridges with MSE walled abutments at the CSX railroad crossing	\$267,032	No	Although there are perceived construction savings, there would be more maintenance issues and potential costs with MSE walls and the approach roadway than there would be with typical spill through abutments. Also, MSE wall abutments greatly limit the possibility of future expansion for both roadways.
<b>PI No. 0007259 INTERCHANGE (I)</b>				
I-3	Reduce the sum of the paved shoulders widths on ramps from 14 ft to 12 ft	\$77,935	Yes	This will be done.
I-4	Use single span bridges with MSE walls	\$241,945	No	Although there are perceived construction savings, there would be more maintenance issues and potential costs with MSE walls and the approach roadway than there would be with typical spill through abutments. Also, MSE wall abutments greatly limit the possibility of future expansion for both roadways.
I-6	Use 40 ft end spans on bridges across US 80	\$209,853	No	The length of the end spans will be determined during preliminary design. The lengths will be minimized to provide suitable clearance, a stable slope, and adequate drainage. Conceptual information indicates that the end span lengths may have to be substantially greater than 40 ft to provide suitable clearance, accommodate anticipated drainage channels, and to provide a stable slope in the highly erosive soils in this area.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved:

Gerald M. Ross  
Gerald M. Ross, PE, Chief Engineer

Date:

9/2/10

REW/LLM

Attachments

c: Ben Buchan  
Bobby Hilliard/Mike Haithcock/Robert Murphy  
Paul Liles/Bill Duvall/Bill Ingalsbe/Steve Gaston  
Larry Bowman  
Will Murphy/Cory Knox  
Brad Saxon/Teresa Scott  
Ken Werho  
Lisa Myers  
Matt Sanders

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

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INTERDEPARTMENT CORRESPONDENCE

FILE      STP00-0218-01(001) Chatham County      OFFICE   Program Delivery  
            CSSTP-0007-00(259) Chatham County  
            P.I. #522790 and P.I. #0007259      DATE     August 30, 2010  
            Jimmy DeLoach Extension and Interchange

FROM     Bobby K. Hilliard, PE, State Program Delivery Engineer   B.K.H.

TO        Ron E. Wishon State Project Review Engineer  
            Attn: Lisa Myers P.E.

SUBJECT   Responses to Value Engineering Study Alternatives

Attached please find our responses for the Value Engineering Study conducted for P.I. #522790 and P.I. #0007259.

Additionally we have attached correspondence from the office of Roadway Design, The Office of Bridge Design, and The Office of Environmental Services for your review and concurrence with the value engineering recommendations.

The Office of Program Delivery concurs with the Responses.

Please review and if you have any questions please don't hesitate to contact Robert Murphy Project Manager at 404-631-1586.

Thank you,

BKH:  
Attachments

Cc:



**THOMAS & HUTTON ENGINEERING CO.**

50 PARK OF COMMERCE WAY  
POST OFFICE BOX 2727  
SAVANNAH, GEORGIA 31402-2727  
TELEPHONE (912) 234-5300  
FAX (912) 234-2950

August 23, 2010

Mr. Leon Davenport  
Chatham County Engineering  
Post Office Box 8161  
Savannah, GA 31402

Re: STP00-0218-01(001) Chatham County  
Jimmy DeLoach Parkway Extension -  
from I-16 to US 80  
P. I. No. 522790  
Value Engineering Study Final Report

Dear Mr. Davenport:

Based on our meetings with Georgia Department of Transportation and our review of the prepared Value Engineering Study Report, please see the following responses to the Report Recommendations dated March 2010.

**Recommendations:**

1. **Idea RD-1:** Use a 32' depressed median in-lieu of 44' depressed median, Cost Savings: \$610,045.00.  
➤ Yes, the design team will implement this recommendation.
2. **Idea RD-2:** Use Type "A" in-lieu of a Type "B" south bound left turn lane onto driveway at STA 107+00, Cost Savings: \$231,397.00.  
➤ No, the median break at STA 107+00 is being removed from the proposed design. The median break was included in the initial layout to accommodate future growth in the area, but it has been indicated by Chatham County and the Georgia Department of Transportation that it is not required at this time. Cost savings by removing median break: \$379,400.00.
3. **Idea RD-3:** Lower profile grade over the CSX railroad crossing, Cost Savings: \$1,131,781.00.  
➤ Yes, the design team will implement this recommendation.
4. **Idea RD-14:** Relocate or delete southbound U-turn at STA 44+00; use separate structures for Little Ogeechee River Bridge, Cost Savings: \$378,263.00.  
➤ Yes, the design team will implement this recommendation.

Mr. Leon Davenport  
Chatham County Engineering  
August 23, 2010  
Page 2

5. Idea RD-22; Provide single span bridges with MSE walled abutments at CSX RR crossing.  
Cost Savings: \$267,032.00.

> No, at the recommendation of the State Bridge Engineer (see attached), VE  
alternative RD-22 will not be implemented.

If there are any further questions or if any additional information is needed, please  
contact our office at (912)234-5300.

Sincerely,

THOMAS & HUTTON



Doyle D. Kelley, Jr., P.E.

DDK/sawr

Attachment

**McGee Partners, Inc.**

1990 Lakeside Parkway  
Suite 240  
Tucker, Georgia 30084  
T 770.938 6400  
F 770.938 6333

July 14, 2010

Mr. Leon Davenport, P.E.  
Chatham County  
Department of Engineering  
124 Bull Street, Room 430  
Savannah, Georgia 31401

Re: US 80/Jimmy DeLoach Parkway Interchange  
CSSTP-0007-00(259)  
P.I. No. 0007259  
Chatham County  
**VALUE ENGINEERING STUDY  
RECOMMENDATION RESPONSES**

Dear Mr. Davenport:

After reviewing the recommendations from the Value Engineering Study Report prepared by PBS&J, dated March 31, 2010, and the recommendations from the Bridge Office, dated June 23, 2010, we offer the following revised responses to the three design alternatives suggested for the referenced project:

**Alternative No. I-3:** Reduce sum of paved shoulder widths on ramps from 14' to 12', Cost Savings: \$77,935

Yes, the design team will implement this recommendation.

**Alternative No. I-4:** Use single span bridges w/MSE walls (on bridges over US 80), Cost Savings: \$241,945

No, the design team will not implement this recommendation.

Although there are perceived construction savings, there would be more maintenance issues and potential costs with MSE walls and the approach roadway than there would be with typical spill through abutments. Also, MSE wall abutments greatly limit the possibility of future expansion for both roadways.

**Alternative No. I-6:** Use 40' end spans on bridges across US 80, Cost Savings: \$209,853

No, the design team will not implement this recommendation.

The length of the end spans will be determined during preliminary design. The lengths will be minimized to provide suitable clearance, a stable slope and adequate

Mr. Leon Davenport, P.E.  
Page 2  
July 14, 2010

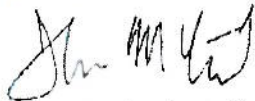
**McGee Partners, Inc.**

drainage. Conceptual information indicates that end span lengths may have to be substantially greater than 40' to provide suitable clearance, accommodate anticipated drainage channels and to provide a stable slope in the highly erosive soils in this area.

We have enclosed a project location map as requested by GDOT Engineering Services.

Please let me know if you have any questions or comments. Should you concur with these responses, please forward this to Mr. Robert Murphy at GDOT.

Sincerely,  
McGee Partners, Inc.



Thomas M. Crochet, PE, PTOE  
President

Enclosure



**Murphy, Robert**

*Roadway Design*

**From:** McMurry, Russell  
**Sent:** Monday, May 24, 2010 6:13 PM  
**To:** Richardson, Darrell; Murphy, Robert  
**Subject:** Re: V.E. Recommendations and Responses for P.I.#522790 and P.I.#0007259 Chatham County

Thank you Darrell. Very good point on future traffic and median width.  
Russell McMurry  
Georgia Department of Transportation  
Sent via Blackberry

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**From:** Richardson, Darrell  
**To:** Murphy, Robert  
**Cc:** McMurry, Russell  
**Sent:** Mon May 24 16:21:23 2010  
**Subject:** RE: V.E. Recommendations and Responses for P.I.#522790 and P.I.#0007259 Chatham County  
Robert,

In general, the 32 foot median is acceptable from a design criteria standpoint.

*RD-1*

*Darrell M. Richardson, P.E.  
Assistant State Roadway Design Engineer  
Georgia Department of Transportation  
404-631-1705 (Office)  
404-895-5005 (Mobile)  
[drichardson@dot.ga.gov](mailto:drichardson@dot.ga.gov)*

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**From:** McMurry, Russell  
**Sent:** Friday, May 21, 2010 12:31 PM  
**To:** Richardson, Darrell  
**Cc:** Murphy, Reginald  
**Subject:** Fw: V.E. Recommendations and Responses for P.I.#522790 and P.I.#0007259 Chatham County

**Murphy, Robert**

RD-3

**From:** DuVall, Bill  
**Sent:** Monday, August 30, 2010 9:48 AM  
**To:** Murphy, Robert  
**Subject:** RE: Scan001 (2).PDF - Adobe Acrobat Professional

Robert,

As we discussed, it is acceptable to lower the grade over the railroad such that the minimum vertical clearance required is provided and accepted by the CSX Transportation. Let me know if you need anything else concerning this matter.

Thanks,  
Bill

Bill DuVall  
Bridge Design  
(404) 631-1883

**From:** Murphy, Robert  
**Sent:** Tuesday, August 24, 2010 11:16 AM  
**To:** DuVall, Bill  
**Subject:** FW: Scan001 (2).PDF - Adobe Acrobat Professional

Bill,

Please review RD-3 and provide concurrence with lowering the Bridge profile.

Thanks,

Robert Murphy  
Senior Project Manager  
Georgia Department of Transportation  
600 West Peachtree Street  
Atlanta Ga. 30308  
404-631-1586 office  
404-309-0807 cell  
email: [romurphy@dot.ga.gov](mailto:romurphy@dot.ga.gov)

**From:** Myers, Lisa  
**Sent:** Friday, July 16, 2010 1:11 PM  
**To:** Murphy, Robert  
**Cc:** Hilliard, Bobby; Haithcock, Michael  
**Subject:** FW: Scan001 (2).PDF - Adobe Acrobat Professional

There are still some problems with these responses.

522790

As I pointed out when I reviewed these before, RD-2 needs concurrence from Traffic Ops. It is very rare that they say yes to using a Type A median opening instead of a Type B.

**Murphy, Robert**

TRAFFIC OPERATIONS:

**From:** Zehngraff, Scott E.  
**Sent:** Friday, August 06, 2010 11:27 AM  
**To:** Murphy, Robert  
**Cc:** Werho, Ken; Zahul, Kathy  
**Subject:** RE: V.E. recommendation for p.I.#522790

In the VE Report, Alternate RD-2, recommended removing the Type B left turn lanes and replacing it with a Type A.

This is a \$231,397 cost savings.

I don't recommend removing any Type B's based on the geometric advantages of them, i.e.: improved sight distance, etc.

With the volumes of traffic on the roadway it would greatly enhance the efficiency of the intersection.

Scott E. Zehngraff, P.E. General Operations Manager Traffic Operations 404-635-8127 cell: 404-805-8016

**From:** Zahul, Kathy  
**Sent:** Wednesday, August 04, 2010 6:47 PM  
**To:** Zehngraff, Scott E.  
**Cc:** Werho, Ken; Murphy, Robert  
**Subject:** FW: V.E. recommendation for p.I.#522790

Scott,  
Please provide a response to the Type A vs. Type B median crossover for this project.

Thanks,  
Kathy

**From:** Murphy, Robert  
**Sent:** Wednesday, August 04, 2010 2:25 PM  
**To:** Zahul, Kathy  
**Subject:** V.E. recommendation for p.I.#522790

Kathy,

I went ahead and attached this report just in case you were having trouble pulling the project up?

RD-2 is the recommendation I need you concurrence on or your thoughts of no going with their recommendation.

Any questions please contact me.

Robert,

**Murphy, Robert**

OES

**From:** Bowman, Glenn  
**Sent:** Thursday, May 20, 2010 1:00 PM  
**To:** Murphy, Robert  
**Cc:** Hilliard, Bobby; Haithcock, Michael; Myers, Lisa; McMurry, Russell; Liles, Paul; DuVall, Bill; Jubran, Abdallah (AJ); Geary, Georgene  
**Subject:** RE: V.E. Recommendations and Responses for P.I.#522790 and P.I.#0007259 Chatham County

Robert,

All of the proposed design responses to the VE recommendations are satisfactory from an environmental perspective. It is important to note that several of the recommended changes would reduce the project impacts to the environment which is also a requirement of NEPA.

Glenn Bowman, P.E.  
State Environmental Administrator  
Georgia Department of Transportation  
600 West Peachtree Street, NW, Atlanta, GA 30308  
Phone: 404-631-1101 Fax: 404-631-1916

**From:** Murphy, Robert  
**Sent:** Thursday, May 20, 2010 11:38 AM  
**To:** McMurry, Russell; Liles, Paul; DuVall, Bill; Jubran, Abdallah (AJ); Bowman, Glenn; Geary, Georgene  
**Cc:** Hilliard, Bobby; Haithcock, Michael; Myers, Lisa  
**Subject:** V.E. Recommendations and Responses for P.I.#522790 and P.I.#0007259 Chatham County

For everyone listed within this email I have attached a copy of the V.E. recommendations submitted by PBSJ and the V.E. responses submitted by both design teams for the listed projects. Engineering Services has posted the official V.E. report on Terex under the P.I. number and archive folder for your use.

Please review each recommendation and responses as required by Engineering Services. I will need your concurrence if you agree with the responses submitted by the design team or I will need your written statement as to why your department does not agree with the responses.

I would like to receive your official letter to the Office of Program Delivery no later than May 25<sup>th</sup>. If there is a problem with meeting this date, please let me know in advance.

Thank you,




**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

**FILE**      STP00-0218-01(001)/CSSTP-0007-00(259)      **DATE**    June 23, 2010  
              CHATHAM COUNTY  
              P.I No. 522790/0007259

**FROM**       Paul V. Liles, Jr., P.E., State Bridge Engineer

**TO**          Bobby Hilliard, P.E., State Program Delivery Engineer  
              Attn: Robert Murphy

**SUBJECT**   **BRIDGE DESIGN VALUE ENGINEERING RESPONSE**

The Value Engineering Study for the above referenced project dated March 31, 2010 contained four VE Alternatives requiring responses from the Bridge Office, VE Alternatives RD-14, RD-22, I-4 and I-6. Below are our recommendations for these alternatives.

**RD-14 VE Alternative** – “Use separate structures for Little Ogeechee River Bridge and a Type A south bound left turn lane reducing bridge width requirement.”

**Recommendation: Possible Implementation.** If the turn lane can be eliminated as proposed in this VE Alternative, the bridges can be constructed separately. Elimination of the turn lane will be determined by the road designer.

**RD-22 VE Alternative** – “Provide single span bridges with MSE walled abutments at the CSX railroad crossing.”

**Recommendation: Do Not Implement.** Although there are minimal perceived savings based on the analysis in the VE Study, the Bridge Office does not recommend implementation. Long term, there are more maintenance issues with MSE walls and the approach roadway than there are with typical spill through abutments. Also, MSE wall abutments greatly limit the possibility of future expansion for both the road being carried as well as the facility beneath the structure. Due to sequence of construction and coordination with subcontractors and equipment, bridge costs and wall costs are usually higher than the general bridge and wall costs when used for separate structures.

JUN 25



**I-4 VE Alternative** – “Use single span bridges w/ MSE walls.”

**Recommendation: Do Not Implement.** Although there are minimal perceived savings based on the analysis in the VE Study, the Bridge Office does not recommend implementation. Long term, there are more maintenance issues with MSE walls and the approach roadway than there are with typical spill through abutments. Also, MSE wall abutments greatly limit the possibility of future expansion for both the road being carried as well as the facility beneath the structure. Due to sequence of construction and coordination with subcontractors and equipment, bridge costs and wall costs are usually higher than the general bridge and wall costs when used for separate structures.

**I-6 VE Alternative** – “Use 40’ end spans on bridges across US 80.”

**Recommendation: Possible Implementation.** Structurally the 40 foot ends spans proposed can be constructed as long as there is suitable clearance and adequate drainage. These issues should be determined by the design engineer during the preliminary layout phase of the project.

If you have any questions and/or comments, please contact Bill DuVall of the Bridge Design Office at (404) 631-1883 or at email address [bduvall@dot.ga.gov](mailto:bduvall@dot.ga.gov).

PVL/WMD

cc: Ron Wishon, Engineering Services  
Bill DuVall, Bridge Office

US 80/Jimmy DeLoach Parkway Interchange  
CSSTP-0007-00(259)  
P.I. No. 0007259  
Chatham County



**PRECONSTRUCTION STATUS REPORT FOR PI:522790-0007259**

<b>PROJ ID:</b> 0007259		<b>CR 984/JIMMY DELOACH PARKWAY @ SR 174/S 80 - INTERCHANGE</b>		<b>MGMT LET DATE:</b> 10/15/2013
<b>COUNTY:</b> Chatham	<b>MPD:</b> Savannah TMA	<b>PRIORITY CODE:</b>	<b>MGMT ROW DATE:</b> 12/15/2011	
<b>LENGTH (MI):</b> 1.10	<b>TIP #:</b> 2005-H-01	<b>DOT DIST:</b> 5	<b>BASELINE LET DATE:</b> 10/14/2013	
<b>PROJ NO.:</b> CSS1P-0007-00(259)	<b>MODEL YR:</b>	<b>CONG. DIST:</b> 12	<b>SCHED LET DATE:</b> 10/3/2013	
<b>PROJ MGR:</b> Murphy, Robert P.	<b>TYPE WORK:</b> Interchange	<b>BIKE:</b> Y	<b>WHO LETS?:</b> GDOT Let	
<b>AOHD Initiale:</b> MAH	<b>CONCEPT:</b> INTERCHANGE	<b>MEASURE:</b> E	<b>LET WITH:</b>	
<b>OFFICE:</b> Program Delivery	<b>PROG TYPE:</b> New Construction	<b>NEEDS SCORE:</b>		
<b>CONSULTANT:</b> Local Design PE funds	<b>Prov. for ITS:</b> N	<b>BRIDGE SUFF:</b>		
<b>SPONSOR:</b> Chatham County				
<b>DESIGN FIRM:</b> McGee Partners, Inc.	<b>BOND PROJ.:</b>			

BASE START	BASE FINISH	LATE START	LATE FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS					Date Auth
								Activity	Approved	Proposed	Cost	Fund	Status
				Concept Development	4/3/2008	11/5/2009	100	PL	2005	2005	40,000.00	Q23	AUTHORIZED
				PM Submit Concept Report	8/16/2007	3/6/2008	100	ROW	2005	LOCL	13,826,000.00	LOC	PREST
				Concept Report Review and Comments	3/20/2008	4/3/2008	100	CST	LR	LR	21,628,706.00	L230	PREST
				Management Concept Approval Complete	4/3/2008	4/7/2008	100						
				Value Engineering Study	11/5/2009		83						
				Public Information Open House Held	4/26/2007		100						
				Environmental Approval	12/15/2009		66						
				Pub Hear Held/Comm Recp (EATONSI, GEPA)	4/10/2010		100						
				Mapping	10/16/2009	11/5/2009	100						
				Field Surveys/SDE	5/10/2009		5						
				Preliminary Plans			0						
				Preliminary Bridge Design			0						
				Underground Storage Tanks			0						
				404 Permit Obtainment			0						
				FPFR Inspection			0						
				R/W Plans Preparation			0						
				R/W Plans Final Approval			0						
				L & D Approval			0						
				R/W Authorization			0						
				Stake R/W			0						
				Soil Survey			0						
				Bridge Foundation Investigation			0						
				Final Design			0						
				Final Bridge Plans Preparation			0						
				FPFR Inspection			0						
				Submit FPFR Responses (OLSI)			0						

<b>Bridge:</b>		<b>BRIDGE REQUIRED</b>		<b>District Comments</b>	
<b>Design:</b> Consultant preparing for V.E. March 2010	<b>EIS:</b> EAINotAppvdOnSchedule-Dec 2011 ROW/LB 4.8.10	<b>PE Cost Est Amt:</b> 40,000.00	<b>Date:</b> 12/22/2009	<b>Activity:</b> PE	<b>Cost:</b> 0.00
<b>LGPA:</b> PMA REQ CHATHAM DO PL & UTIL/ROW & CST TO BE DONE BY FUTURE AGREEMENTS 2-28-06	<b>Programing:</b> #1 7.08#2 11-08#3 4-2010	<b>ROW Cost Est Amt:</b> 13,826,000.00	<b>Date:</b> 4/17/2008	<b>Activity:</b> ROW	<b>Cost:</b> 0.00
<b>Utility:</b> SUE	<b>EMC:</b> INTERCHANGE, PE BY COUNTY	<b>CST Cost Est Amt:</b> 21,628,706.00	<b>Date:</b> 12/22/2009	<b>Activity:</b> CST	<b>Cost:</b> 0.00
<b>Conceptual Design BC - Interchange Not Evaluated</b>		TAS 2-06/PMA sent to GDOT 2-28-06/McGee Partners to do concept only. Initial concept meeting held 2-22-06 1-24-07/PMA needs resolution 3-7-07/PROH 4-26-07/8-16-07/Concept Mtg held 9-24-07/reviewing draft concept report and P/OH comments 2-22-08/concept report routing for approval County has project on hold until Phase 1 is extended (9/25/09) Working through V.E. recommendations tied to 522790 extension. 8-3-10			
<b>Prel. Parcel CT:</b> 57	<b>Total Parcel in ROW System:</b>	<b>Acquired by:</b> LOC	<b>DEEDS CT:</b>		
<b>Under Review:</b>	<b>Options - Pending:</b>	<b>Acquisition MGR:</b> Cravey, Mack (LOC)			
<b>Released:</b>	<b>Condemnations- Pending:</b>	<b>R/W Cert Date:</b>			



## JIMMY DELOACH PARKWAY EXTENSION FM I-16 TO SR 26/US 80

W105 DE NO